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PATENT & TRADEMARK OFFICE

FIG. 1

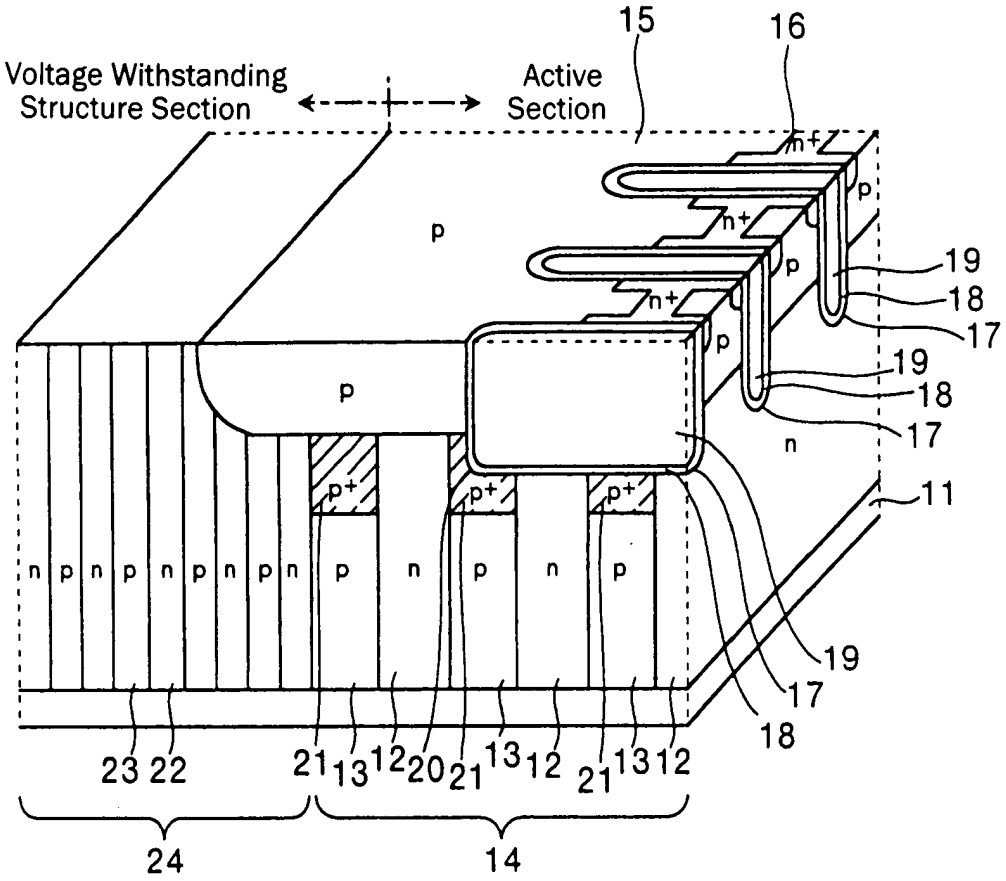


FIG. 2

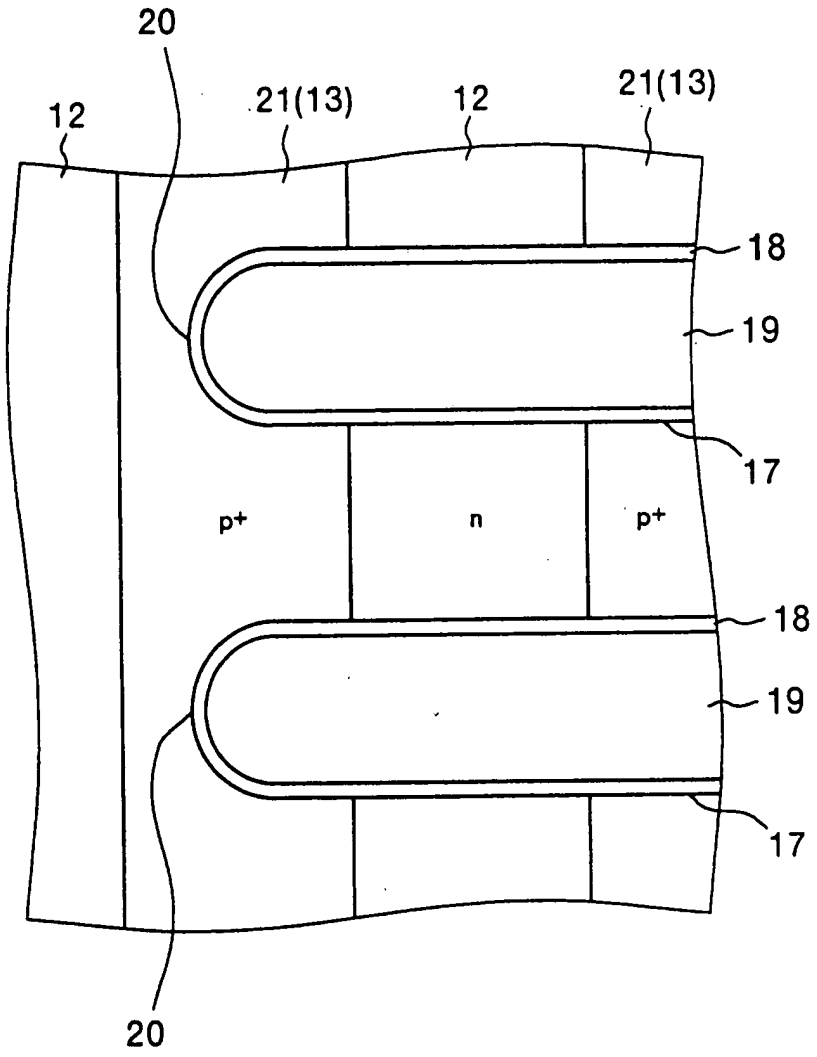


FIG. 3

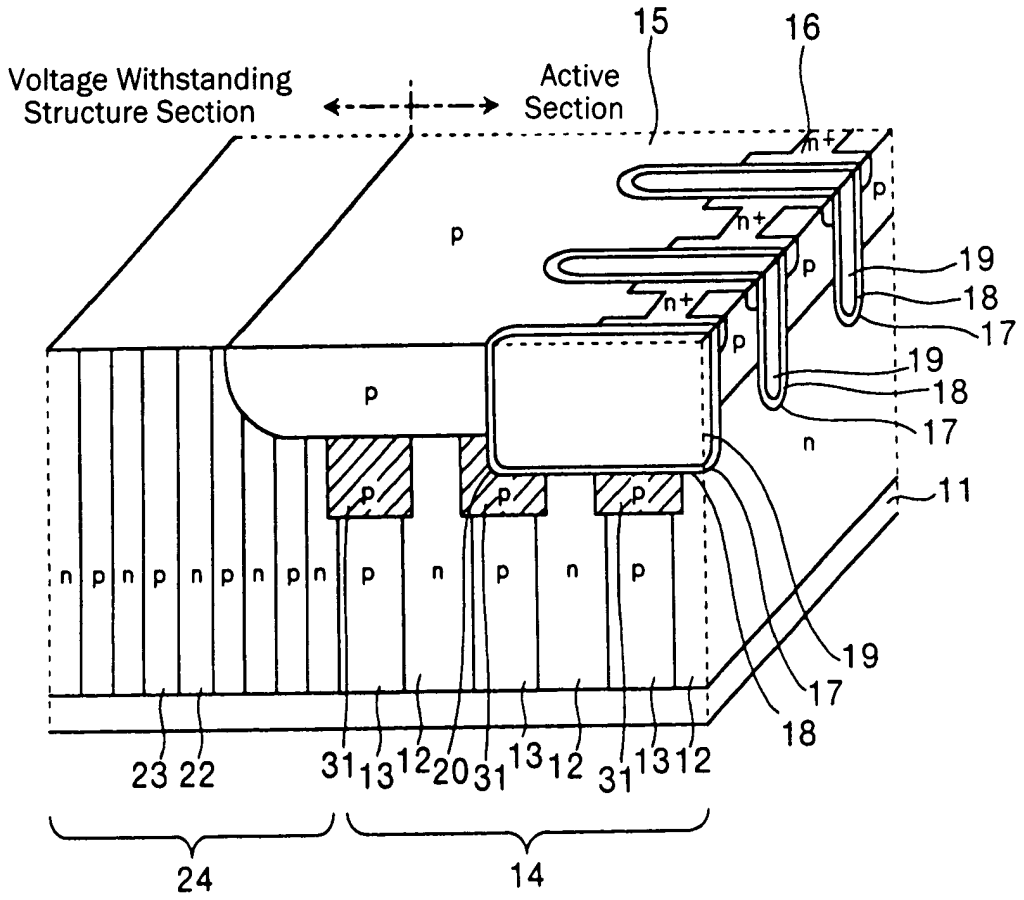

Voltage Withstanding Structure Section
Active Section
15
16
n+
p
19
18
17
11
n
23
22
31
13
12
20
24
14

FIG. 4

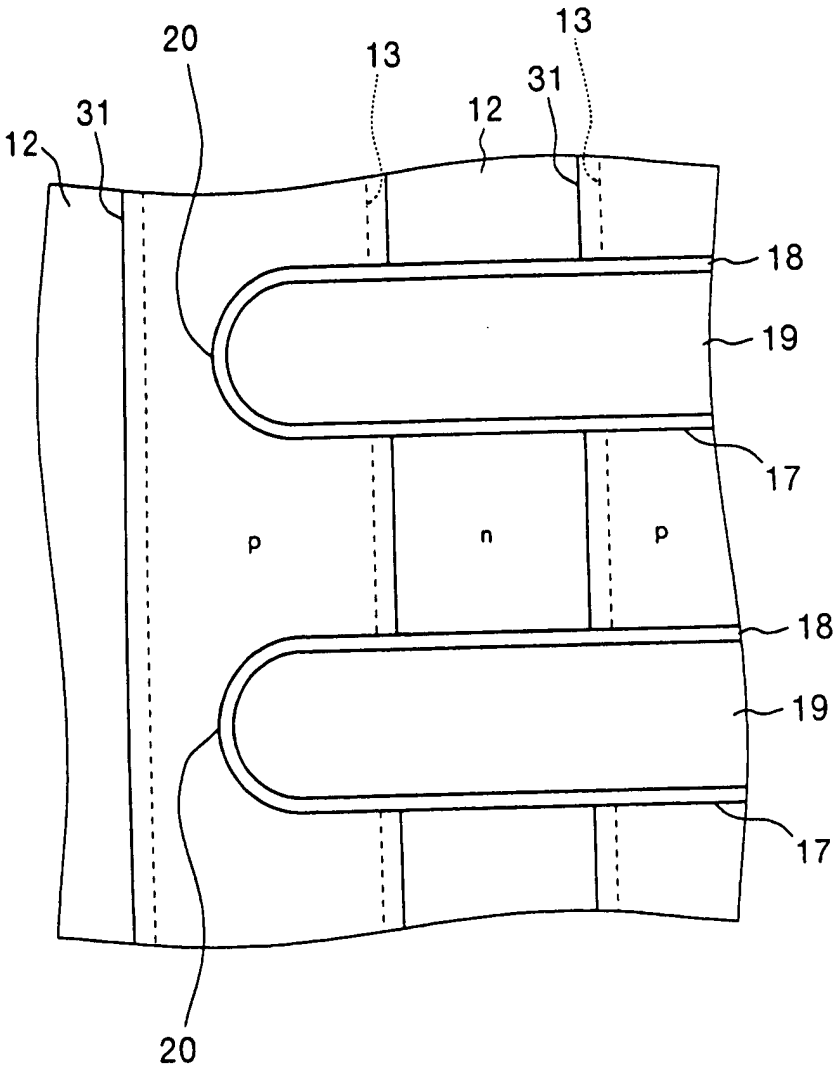


FIG. 5

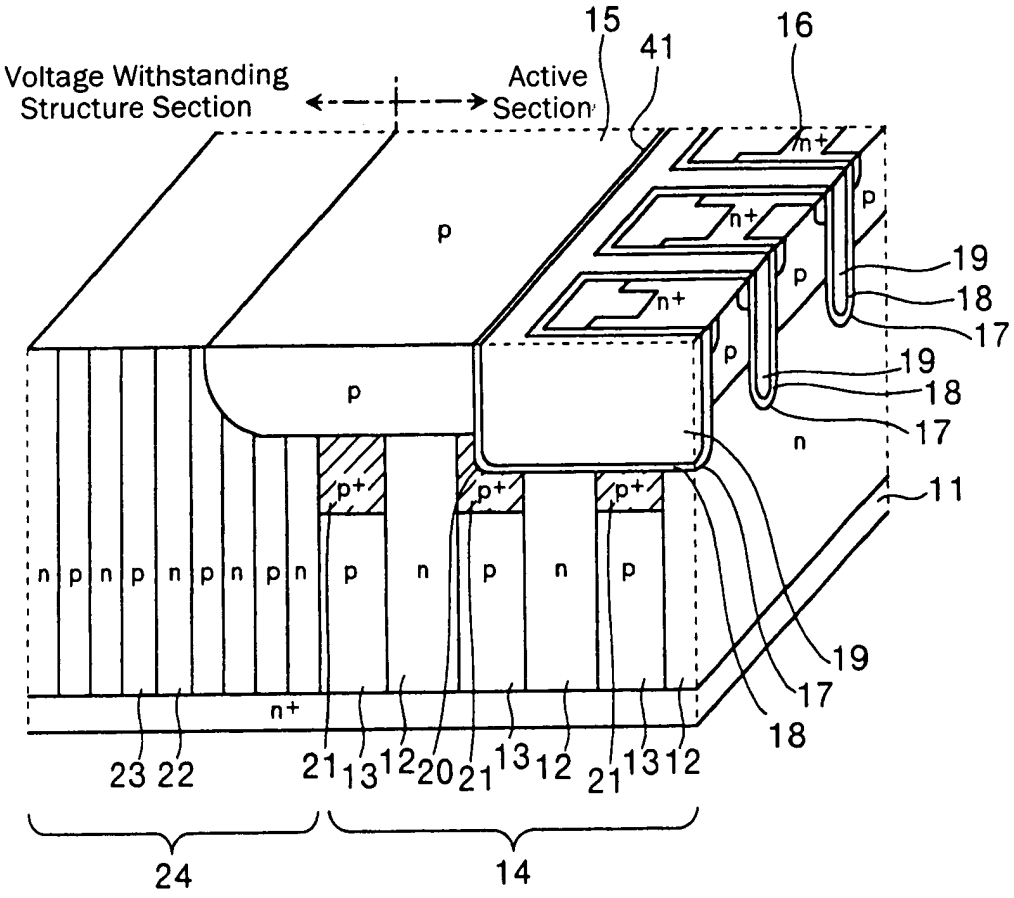

Voltage Withstanding Structure Section
Active Section
15
41
16
n+
p
19
18
17
11
p+
n
23 22
21 13 12 20 21 13 12 21 13 12
24
14

FIG. 6

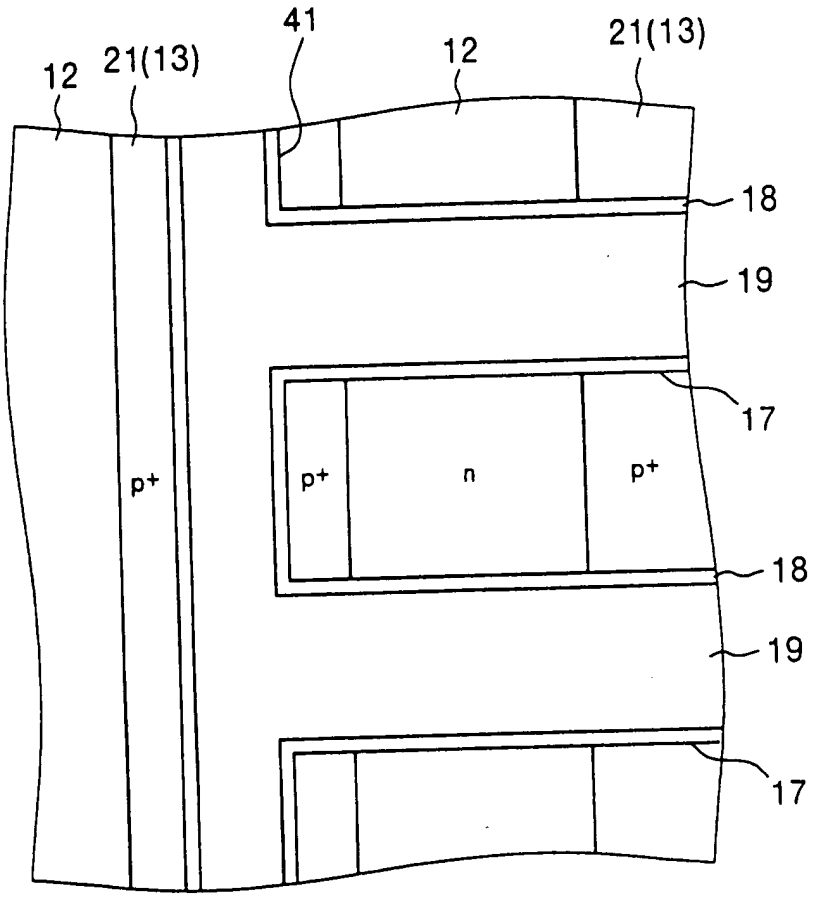
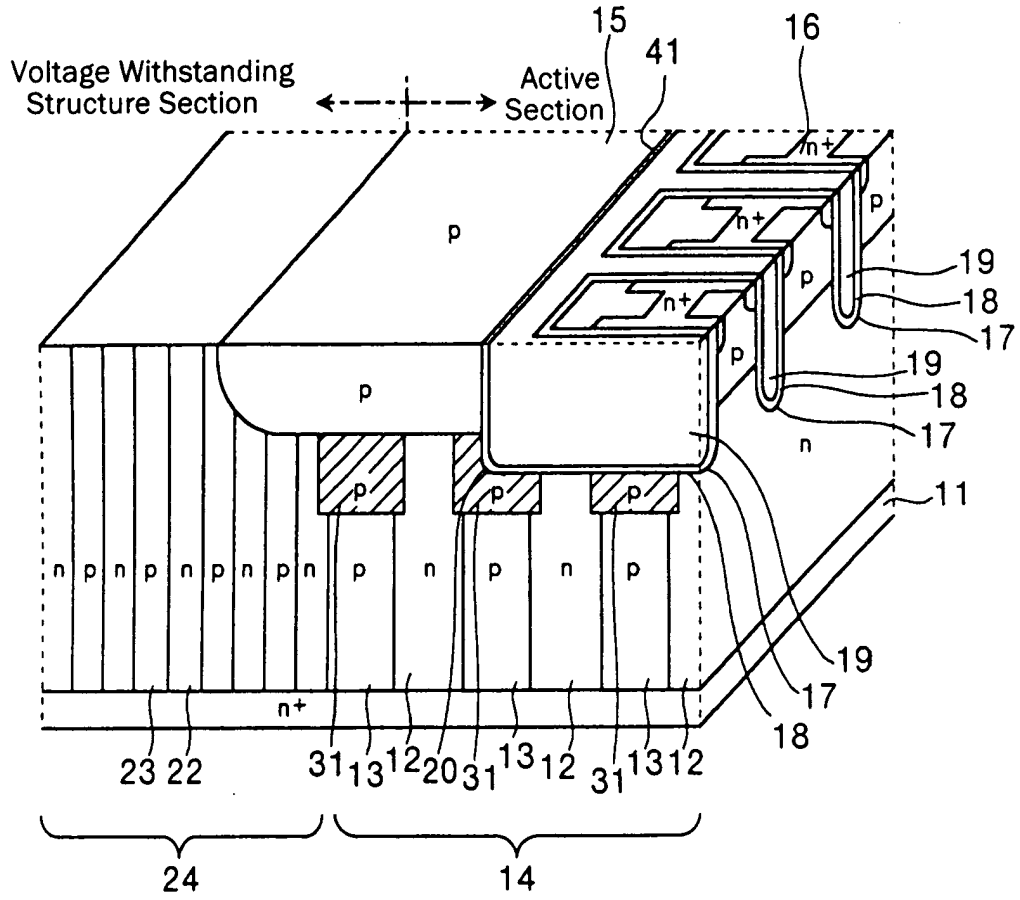


FIG. 7


Voltage Withstanding Structure Section
Active Section
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31 13 12 20 31 13 12 31 13 12
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FIG. 8

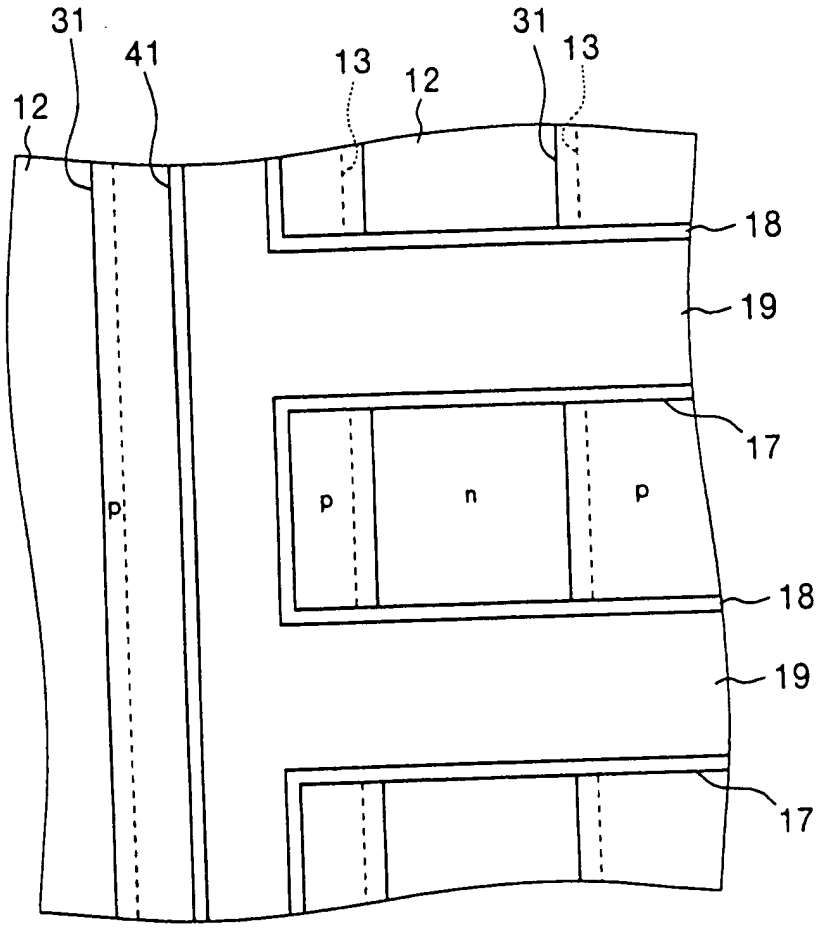
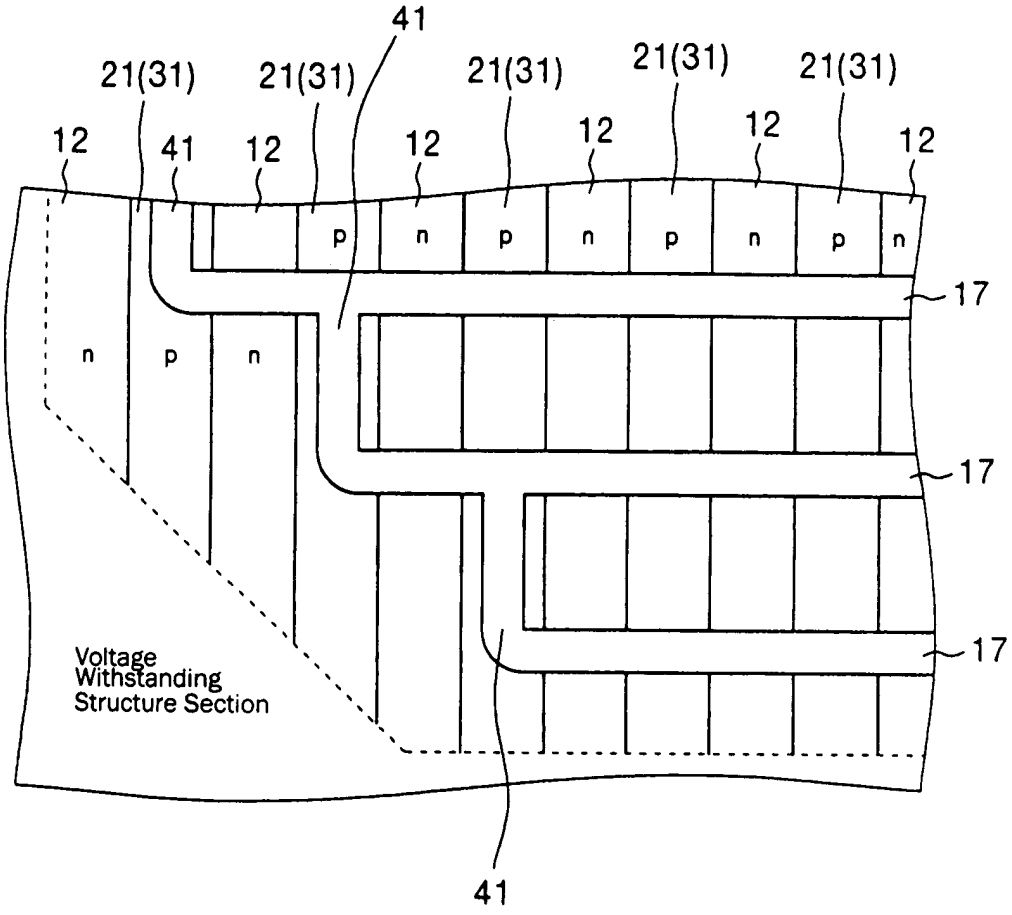


FIG. 9


41
21(31)
21(31)
21(31)
21(31)
21(31)
12
41
12
12
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12
12
12
p
n
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17
n
p
n
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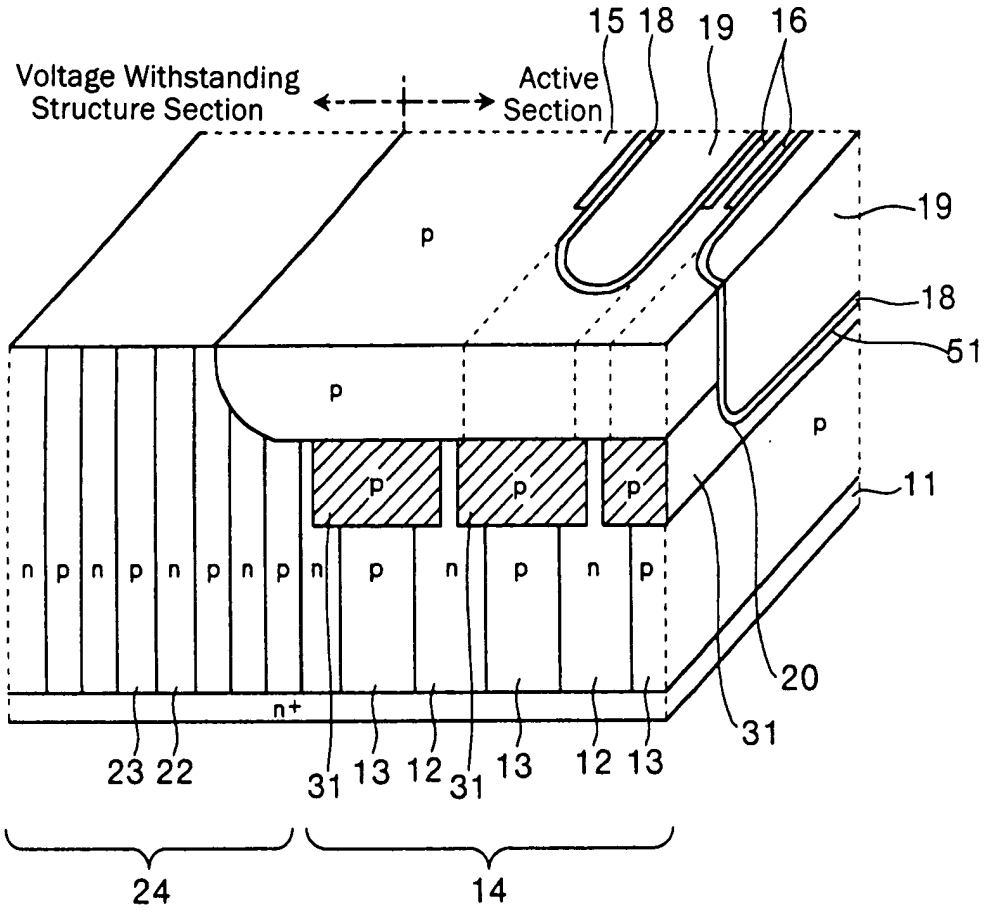
17
Voltage
Withstanding
Structure Section
41

FIG. 10


15
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Voltage Withstanding Structure Section
Active Section
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13
12
31
13
12
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24
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FIG. 11

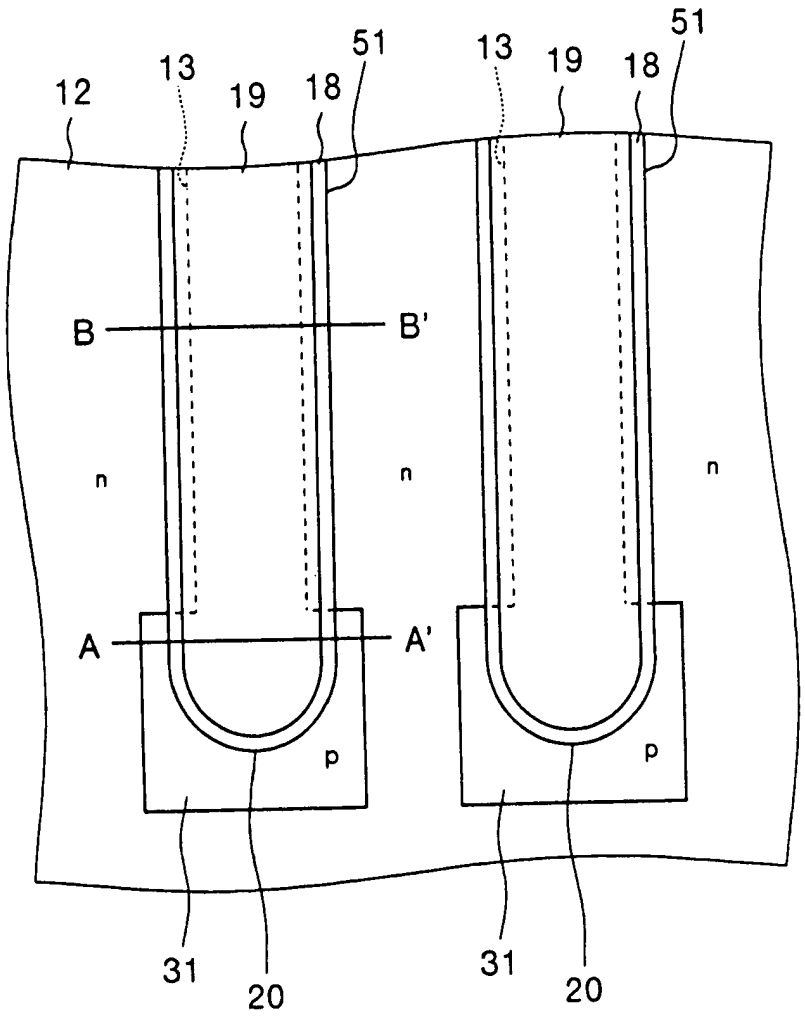

FIG. 12

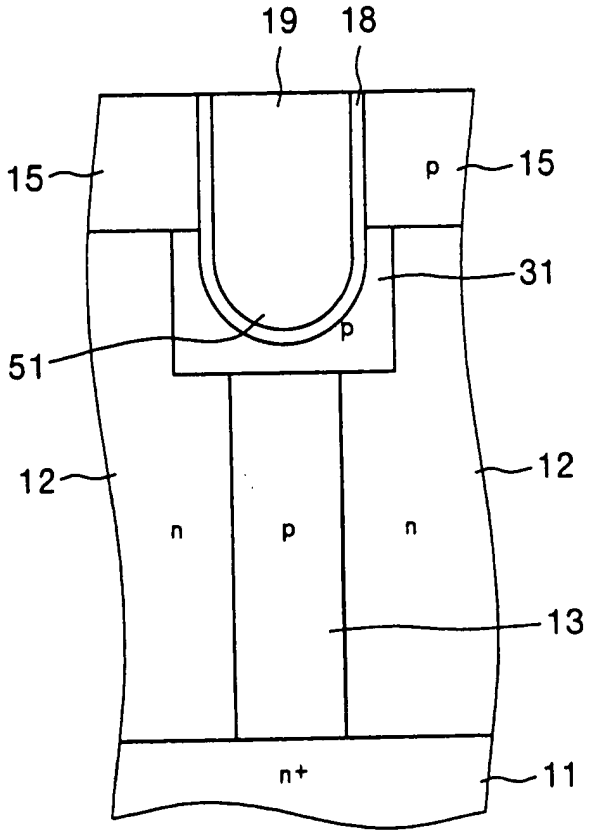

FIG. 13

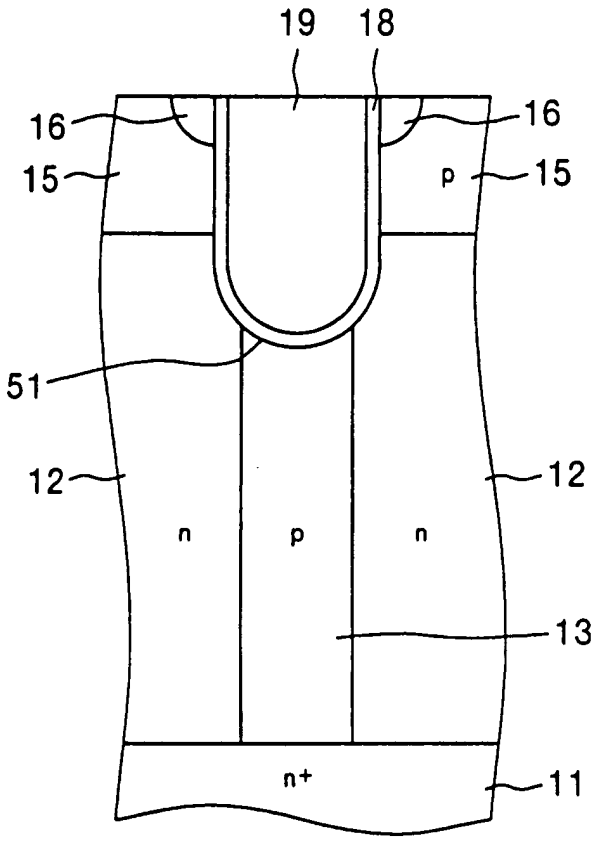

FIG. 14

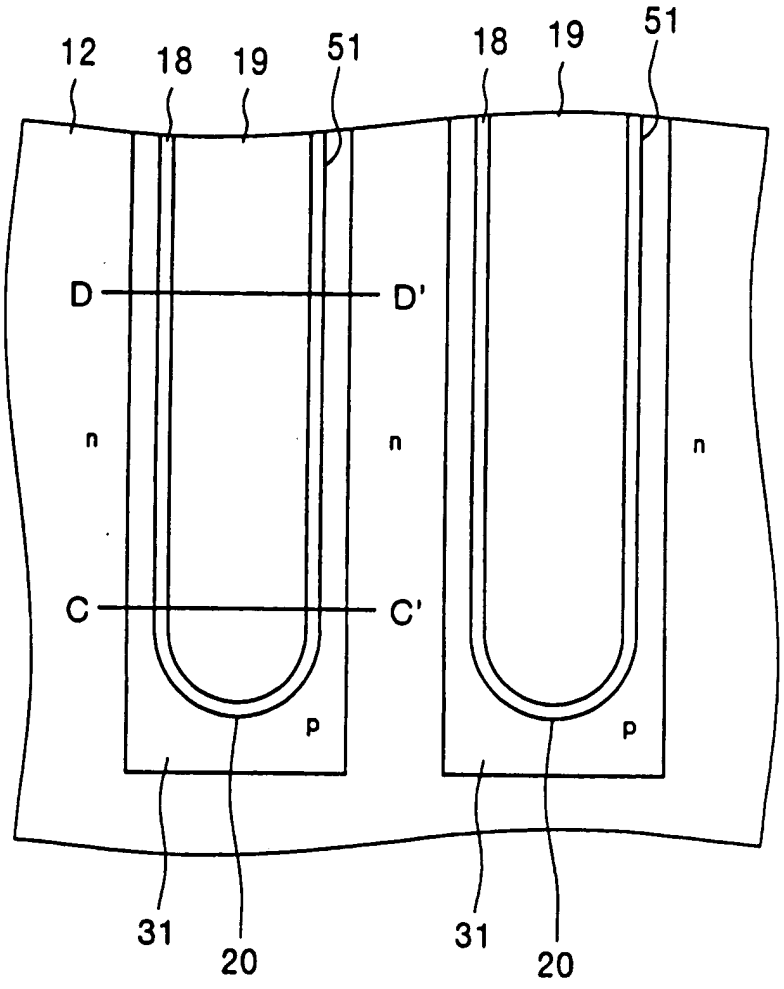

FIG. 15

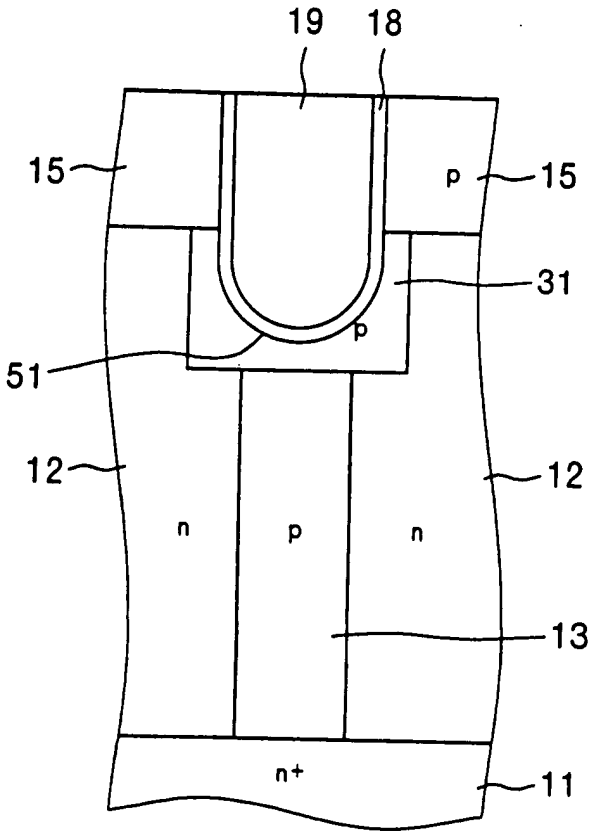
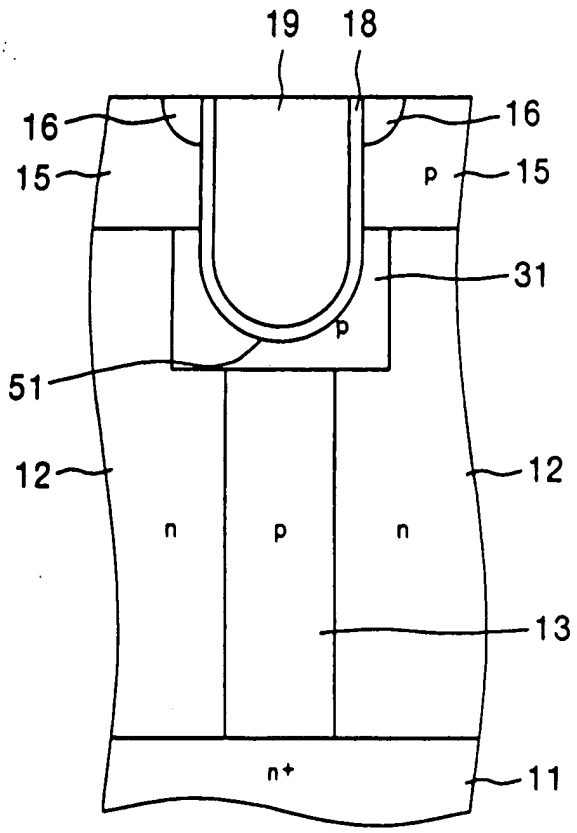
FIG. 16